# Salton Sea SCH Project Initial Screening Criteria

The general locations where the Salton Sea Species Conservation Habitat (SCH) Project could be implemented were identified initially based on the requirement that sites be in proximity to a potential water source; thus, generalized sites were identified along the New, Alamo, and Whitewater rivers. The initial estimate assumed that 2,400 acres of habitat could be created based on available bond funding, and preliminary review of the areas near these rivers indicated that adequate land is available through a combination of sites at one or more locations. The sites and project components that are being considered and that will eventually become alternatives to be evaluated in the EIS/EIR are all intended to meet the SCH Project goals and objectives, which follow.

**Table 1 Draft SCH Project Goals and Objectives**

| | |
|---|---|
| Goal 1 | Develop a range of aquatic habitats that will support fish and wildlife species dependent on the Salton Sea |
| Objectives | Provide adequate foraging habitat for piscivorous (fish-eating) bird species |
| | Develop habitats required to support piscivorous bird species |
| | Support a sustainable, productive aquatic community |
| | Provide suitable water quality for fish |
| | Minimize adverse effects to desert pupfish |
| | Minimize risk of selenium |
| | Minimize risk of disease/toxicity impacts |
| Goal 2 | Develop and refine information needed to successfully manage the SCH Project through an adaptive management process |
| Objectives | Identify uncertainties in achieving the objectives |
| | Design science-based means to test alternatives and reduce uncertainty |
| | Develop and implement a monitoring plan |
| | Develop a decision-making framework |
| | Provide proof-of-concept for future restoration efforts |

## 1.1 EXCLUSIONARY CRITERIA

Potential exclusionary criteria have been identified in order to begin refining the range of potential project sites and, if confirmed, will be applied to the site locations near the rivers in order to determine whether any of these sites would not be viable. The exclusionary criteria are: (1) adequate water supply (quantity, quality, and seasonal availability), (2) available water rights, and (3) available land. If a site does not meet all of the exclusionary criteria, it should be eliminated because these are intended to be those that are essential to the successful completion

of the SCH Project. The following discussions provide some context for the future application of these criteria to individual sites.

### 1.1.1 Water Availability

The streamflow of the three primary freshwater inflows to the Salton Sea is measured daily at U.S. Geological Survey (USGS) gaging stations. The average minimum monthly flow for the period of each stream gage record is summarized in Table 2 to indicate the availability of flow. The table also includes the volume of land that is available above -232 mean sea level (msl) and above -234 msl, as well as the volume for the peak runoff. Figures 1 through 3 show the average monthly flow for the year, and Figure 4 shows the exceedance for the average monthly flow for the July (the highest evaporation month)[1].

**Table 2 Available land, average monthly runoff, and average minimum monthly flow at the New, Alamo, and Whitewater rivers**

| River | Land Available between -228 msl and -232 msl | Land available between -228 msl and -234 msl | Average Monthly Runoff (af) | Range of Average Minimum Monthly Flow | |
|---|---|---|---|---|---|
| | | | | October-March Flow (cfs) | April-September Flow (cfs) |
| New | 2,100 acres | 2,650 acres | 43,623 (April) | 446 – 561 | 507 – 645 |
| Alamo | 2,910 acres | 3,420 acres | 64,642 (April) | 441 – 753 | 720 – 916 |
| Whitewater[a] | 670 acres | 940 acres | 1,353 (January) | 69 – 80[b] | 64 – 74[b] |

Notes:

a. Land available at the Whitewater River does not include lands owned by the Torres Martinez Tribe.

b. Average monthly flow is used due to gaps in data for the average minimum monthly flow.

Source: DWR and DFG files; USGS 2010 (http://waterdata.usgs.gov/nwis/dv/?referred_module=sw)

To account for evaporation, a total of approximately 14,400 acre-feet (af) of freshwater would have to be diverted annually (assuming that 2,400 acres of habitat would be restored)[2]. This diversion level is a minimum amount to maintain the SCH volume, but would result in increasing salinity. To maintain salinity, a greater diversion amount would be needed. The average diversion for evaporation would be 20 cubic feet per second (cfs), but for the peak evaporation month (July), the diversion would need to be about 32 cfs. To control salinity, the diversion would have to increase beyond that required to maintain the volume (32 cfs peak) to as high as 100 cfs, depending on the final desired salinity and other water quality or habitat needs.

The potential for groundwater to be at least a partial water supply also is being considered, but a final determination has not been made.

1 Information was obtained from the USGS at http://waterdata.usgs.gov/nwis/dv/?referred_module=sw.

2 If all 2,400 acres were restored in only one of the three generalized locations, then the water would be diverted from only one river. If a combination of locations were used, then the water would be diverted from a combination of rivers, and the demand at any one location would be reduced.

### 1.1.2 Water Rights

The diversion of use of water from California streams is generally under the control of the State Water Resources Control Board. Generally, water that is diverted for use on lands that are not contiguous with the river is subject to an appropriate right (for diversion and use). However, diversion and use of water from the lower reaches of the Alamo, New, and Whitewater rivers for the SCH Project may not follow some or all of the normal regulations and processes. For example, the California legislature adopted a statute declaring the primary use of the Salton Sea for the collection of agricultural drainage water, seepage, and other flows (Assembly Bill 461, 1968; Statutes 1968, Chapter 392). The elevation of the Salton Sea was defined as lands below -220 feet mean sea level (msl) by Public Water Reserve No. 90-1 (signed in March 1924) and Public Water Reserve No. 114 (signed in February 1928). These lands were designated by the federal government to be used as a repository to receive and store agricultural, surface, and subsurface drainage waters from Imperial and Coachella valleys.

#### 1.1.2.1 New and Alamo Rivers

The New and Alamo rivers are not designated by the California State Water Resources Board as fully appropriated. The Metropolitan Water District of Southern California filed applications for appropriative rights for essentially all of the available water in each of these rivers in 1997 and 2004. These applications are still pending. The State is currently determining whether appropriative water rights permits would be necessary or required for SCH and if so, how the previously submitted applications on the New and Alamo rivers will be considered since they are for domestic use.

#### 1.1.2.2 Whitewater River

The Whitewater River is designated by the California Sate Water Resources Board as a fully appropriated stream from the Salton Sea to the headwaters. The State is currently determining whether the “fully appropriated” status of the Whitewater River is applicable to the SCH Project. Specifically, it appears that this status would be applicable to diversions upstream of the Salton Sea, but it is not clear whether it is applicable at approximately elevation -220 msl and below.

### 1.1.3 Available Land

The land on which the SCH Project would be constructed needs to be available for the life of the SCH Project. The preferred method of obtaining land would be through a long-term lease, although an easement or right-of-way may be appropriate for the diversion and conveyance facilities. Land around the New, Alamo, and Whitewater rivers is in public and private ownership. Near the Whitewater River, the land is owned by Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), U.S. Bureau of Reclamation (Reclamation), the Torres Martinez Tribe, private holdings, and the State of California. At the southern end of the Sea, the ownership is predominately IID with some federal holdings. At the southern end there are also federal holdings that are currently part of the National Wildlife Refuge program. The available land above elevations -234 and -232 is shown in Table 2.

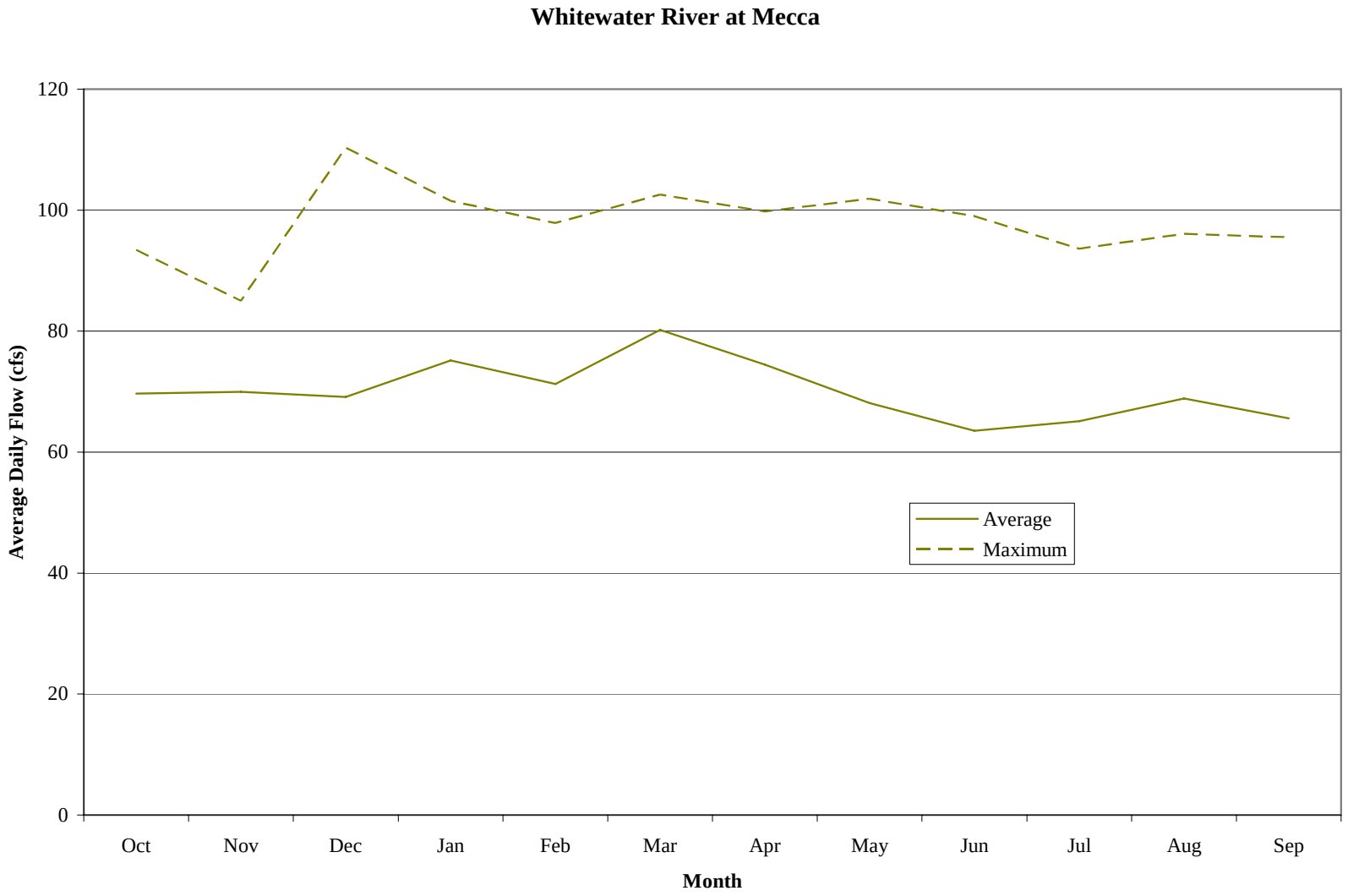


**Figure 1** **Whitewater River average daily flow**

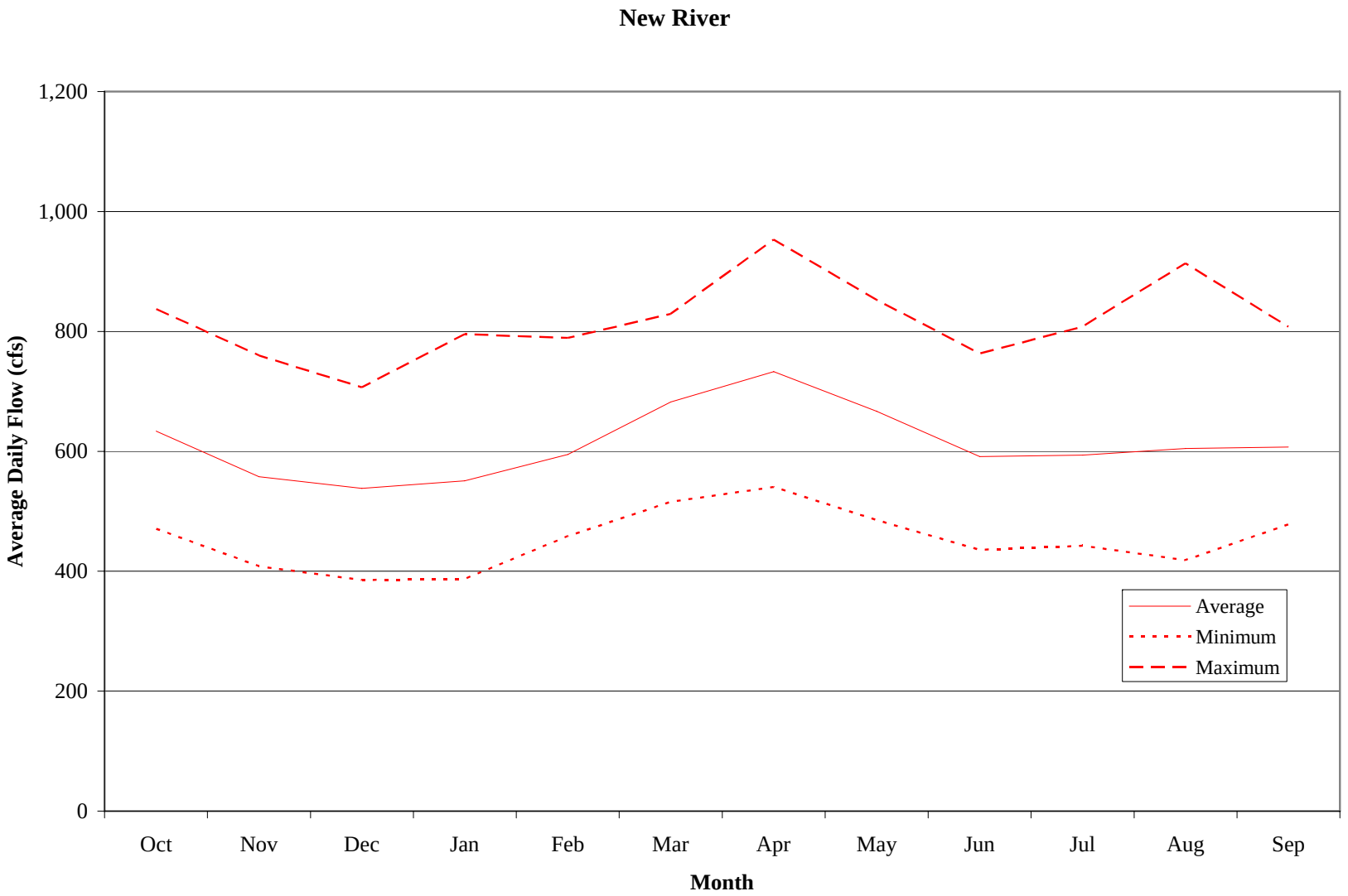


**Figure 2** **New River average daily flow**

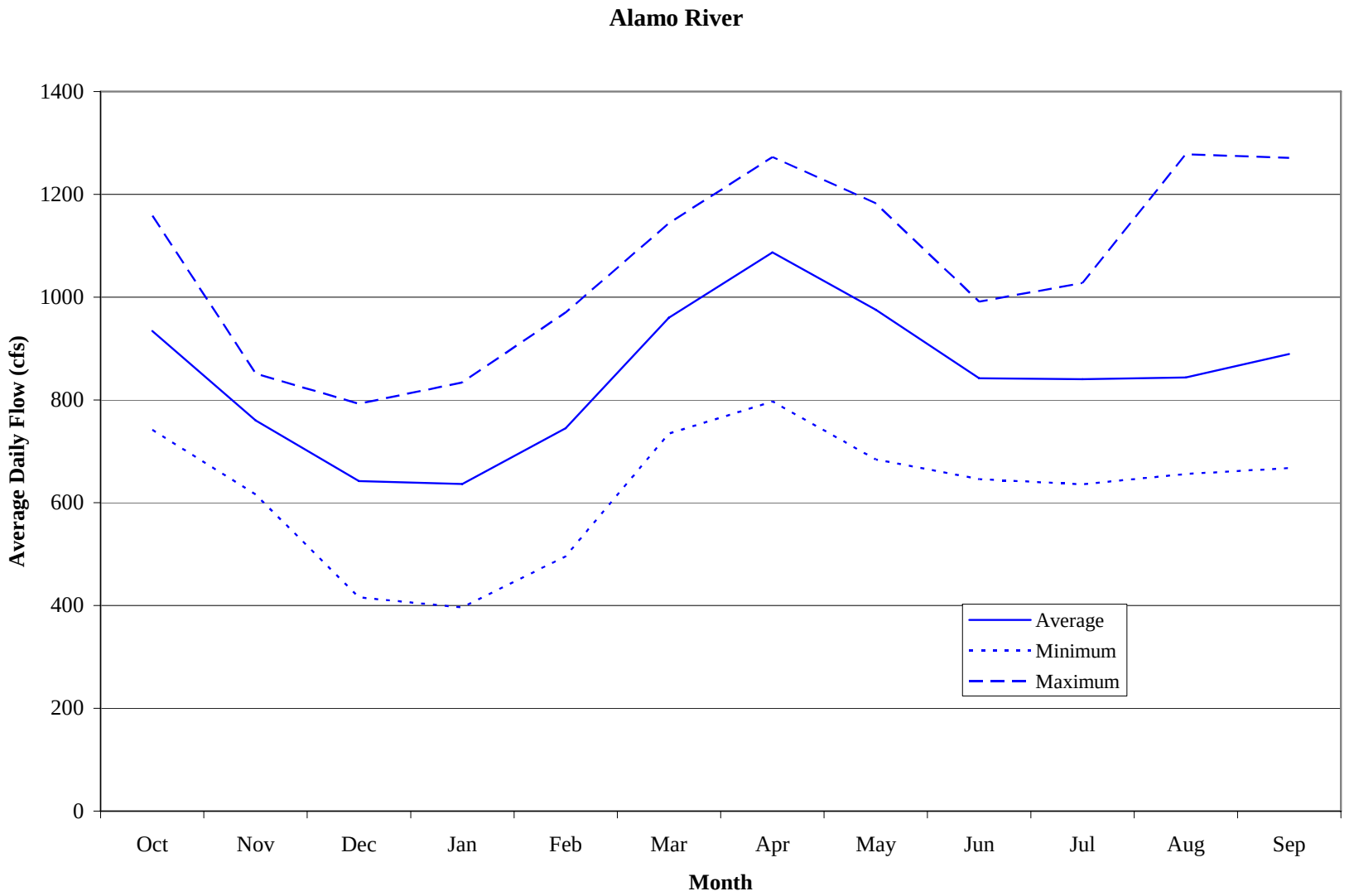


**Figure 3** **Alamo River average daily flow**

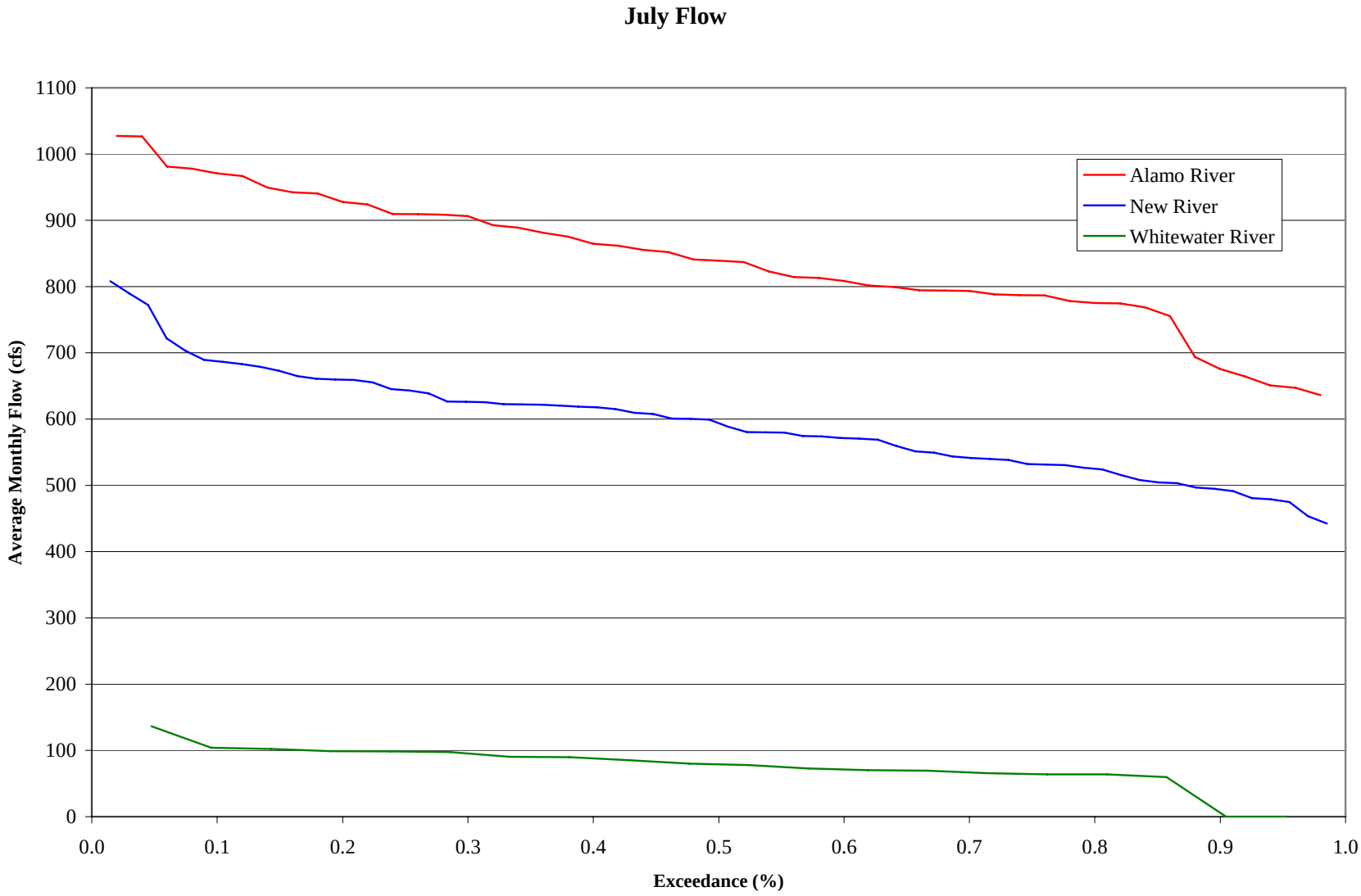


**Figure 4** **Exceedance plot of average monthly flow for July**